

Reasons for Misuse of Prescription Medication Among Physicians Undergoing Monitoring by a Physician Health Program

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Objectives: Substance-related impairment of physicians is a small but serious problem, with significant consequences for patient safety and public health. The purpose of this study was to identify reasons for prescription drug misuse among physicians referred to a physician health program for monitoring because of substance-related impairment, to develop better mechanisms for prevention and intervention.

Methods: A total of 55 physicians (94.5% male) who were being monitored by their State physician health program because of substance-related impairment participated in guided focus group discussions. Participation was anonymous. Discussions were transcribed from 9 separate focus groups, lasting 60 to 90 minutes each. Qualitative analyses were conducted to examine themes.

Results: All participants were diagnosed with substance dependence, and 69.1% of them endorsed a history of misusing prescription drugs. Participants documented the following 5 primary reasons for prescription drug misuse: (1) to manage physical pain, (2) to manage emotional/psychiatric distress, (3) to manage stressful situations, (4) to serve recreational purposes, and (5) to avoid withdrawal symptoms.

Conclusions: Our results emphasize the importance of self-medication as a leading reason for misusing prescription medications, although recreational use was also an important factor. Prevention efforts targeting prescription drug misuse among physicians should be initiated during medical training, with continuing education requirements throughout the physicians' careers.

Key Words: addiction, impaired physicians, physician health, prescription drug misuse

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Physicians take an oath to provide competent medical care with compassion and respect for human dignity (Meffert, 2009). However, when impaired by substance use, they may become “unable to practice with reasonable skill and safety,” which violates their code of conduct (American Medical Association, 1973) and places a burden upon their colleagues to refer or report them (Farber et al., 2005; DesRoches et al., 2010). Substance use is the most frequent cause of impairment among physicians (Talbot and Wright, 1987; Wijesinghe and Dunne, 2001). Indeed, about 10% to 15% of physicians will have a substance use disorder in their lifetime (Baldisseri, 2007). The rate of physician drug use is similar to that in the general population (Compton and Volkow, 2006; Manchikanti, 2006; SAMHSA, 2011), although physicians seem more likely to misuse prescription drugs (Merlo and Gold, 2008).

Understanding the reasons for prescription drug misuse by physicians would help educators, administrators, colleagues, and providers more successfully identify, treat, and monitor addicted physicians. However, because most physicians do not self-refer for treatment of substance use disorders, these data have been difficult to collect. One way to acquire information from this special population is to partner with physician health programs (PHPs) to recruit study participants. Physician health programs are state-specific organizations, which were established to ensure that distressed or impaired physicians receive adequate treatment and long-term monitoring so that they are able to safely return to practice. The PHPs generally require that addicted physicians undergo long-term treatment, attend weekly self-help/monitoring group meetings, and receive random weekly drug screening (DuPont et al., 2009). It is noteworthy that previous research has demonstrated that 78% of PHP participants remain substance free, with no relapse, at the 5-year follow-up (McLellan et al., 2008). Unfortunately, most physicians with substance use disorders suffer for years before they are referred to a PHP. As a result, more information is needed to facilitate referrals for physicians in need.

Despite the significant public health impact of substance use among physicians, there are few empirical data available

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regarding prescription drug misuse in this population. Previous research has suggested that access to prescription medications with abuse liability may increase risk for substance abuse among physicians (Hughes et al., 1999; Zacny and Galinkin, 1999; Bennet and O'Donovan, 2001; Verghese, 2002), and physicians have described elaborate methods for diverting prescription drugs (Cummings et al., 2011). However, more information is needed to understand reasons for prescription drug misuse among physicians, to develop better mechanisms for prevention and intervention. The purpose of this study was to assess reasons for prescription drug misuse reported by physicians being monitored for substance-related impairment by a PHP in a large southeastern state.

METHODS

Procedure

All study procedures were approved by the institutional review boards at the Washington University School of Medicine and the University of Florida, and by the state physician health program (PHP). The requirement for written informed consent was waived to protect the anonymity of the participants.

Physicians were recruited from monitoring groups around the state. Physicians participating in this state PHP are required to attend weekly monitoring groups so that the group facilitator can identify any risks for relapse as early as possible. Seven facilitators assisted with recruitment. They were selected to promote geographic diversity in the sample while maximizing the number of eligible physicians. Physicians were informed about the study and invited to participate by their PHP monitoring group facilitator. Discussion groups for the research study were scheduled at the same time/location as their regular PHP monitoring meetings; however, the monitoring group facilitators were not present during the research.

Guided Group Discussions

Between December 2008 and March 2009, 9 separate discussion groups were conducted by 2 experienced researchers (S.M.C., L.J.M.) who were unknown to the participants. Discussions had 4 to 13 participants in each group. Participants remained anonymous from the researchers and only referred to themselves and one another by a randomly assigned number. Verbal consent was obtained in place of written informed consent to ensure anonymity. All discussions were digitally recorded and maintained on a password-protected computer. All written materials were kept under lock and key. The audio files were professionally transcribed and then checked for quality control against the audio files. Word files of the transcriptions were uploaded to Atlas.ti for coding and analysis.

Measures

Participants completed a demographic questionnaire before the focus group and provided information regarding their work history, family background, and substance use patterns.

Data Analyses

Transcripts were reviewed by the researchers who conducted the guided group discussions. Major themes were identified, and 2 transcripts were coded independently by each researcher to (1) develop a master code list and (2) compare coding to ensure consistency. When agreement was reached, the remaining transcripts were coded for thematic content utilizing the master code list. Quantitative data were entered into MS EXCEL and then converted to SAS for analysis.

Qualitative data analysis used the Grounded Theory Method (Strauss and Corbin, 1990) and was completed by the researchers who led the discussion groups. In the Results section, quotations are parenthetically identified by the participants' group number and participant number [eg, "(2.1)"] refers to a quote from participant 1 in discussion group 2]. Quotations have been edited slightly to remove grammatical errors.

RESULTS

Demographics

As shown in Table 1, the participating physicians were primarily male and represented a number of medical specialties. Of the 55 physicians who participated, 38 (69.1%) reported lifetime misuse of prescription medications (ie, took them in ways other than prescribed or used them without an appropriate prescription). Others reported using only alcohol and/or illicit drugs. Methods for obtaining the prescription medications that were misused are described elsewhere (Cummings et al., 2011).

Substances Misused

Data from the demographic survey indicated that 100% of participants who reported misusing prescription medications also endorsed a history of using alcohol or illicit drugs. Descriptive statistics for substance use endorsed by those who misused prescription drugs are included in Table 2.

Reasons for Misusing Prescription Medications

Participants described many reasons for misusing prescription medications. In general, the following 5 major themes emerged: (1) to manage physical pain, (2) to manage

TABLE 1. Characteristics of the Physician Sample

Age (<i>M</i>), yrs	53
Sex	
Male (n = 52)	94.5%
Race	
White	71.7%
Latino	20.8%
Others	7.5%
Medical specialty	
Anesthesiology	14.5%
Family/general medicine	21.8%
Internal medicine or IM specialty	16.4%
Pediatrics	7.3%
Obstetrics and gynecology	3.6%
Psychiatry	10.9%
Surgery	14.5%
Others	10.9%

TABLE 2. Substances Used by Physicians Who Reported Misusing Prescription Medications (n = 38)

Substance Used (No. Responding)	Reporting Lifetime Use, n (%)
Alcohol (n = 34)	32 (94.1)
Illicit substances	
Marijuana (n = 34)	23 (67.6)
Cocaine (n = 33)	19 (57.6)
Illegal stimulants (n = 31)	19 (61.3)
Hallucinogens (n = 32)	15 (46.9)
Club drugs (n = 31)	11 (35.5)
Non-Rx opioids (n = 31)	6 (19.4)
Inhalants (n = 31)	2 (6.5)
Prescription medications	
Opiates (n = 33)	29 (87.9)
Sedatives (n = 33)	24 (72.7)
Stimulants (n = 31)	14 (45.2)

emotional/psychiatric distress, (3) to manage stressful situations, (4) to serve recreational purposes, and (5) to avoid withdrawal symptoms. Detailed descriptions of each theme follow.

Managing Physical Pain

Many physicians who self-medicated reported severe chronic pain related to trauma or surgeries. For example, one physician indicated, “My drug of choice was Soma . . . initially it was prescribed to me because of the back pain. Later, I was taking care of my son who was very sick and I had to move him around. So that was my excuse to use more” (2.13). Unfortunately, in many cases, their prescriptions paved the way for iatrogenic addiction to develop. As another physician described, “I was under pain management and . . . I had an endless supply of drugs . . . I was on a Fentanyl patch and a Fentanyl lollipop . . . And the minute you started taking that, within three or four days, you crave it. I mean . . . you’re addicted to it” (5.4). Several physicians also noted that medical use transformed into recreational use over time [eg, “I went through several trauma surgeries. They gave me Percocet. At first I hated it; then I loved it. And I kept on using it once in a while whenever I had a chance” (6.6)]. Others acknowledged that, as the addiction progressed, their drug of choice shifted from the originally prescribed medication to something else [eg, “I started with opiates after I broke my leg; that’s when it really started. My drug of choice was opiates initially and then I started using Hycodan cough syrup, so that was really my drug of choice towards the end” (2.1)]. In addition, some physicians reported developing problems because of true “self-medication,” in which they were writing prescriptions for themselves. One physician acknowledged, “My partners got concerned about me because I was self-medicating for migraines and I was taking opiates” (2.7).

Managing Emotional Pain and Psychiatric Symptoms

Physicians also reported that emotional pain and psychiatric symptoms contributed greatly to their prescription drug misuse [eg, “I had more emotional pain that felt like physical pain” (5.3)]. In some cases, they found that the drugs effectively treated long-standing problems with anxiety or

depression. As one physician explained, “Drugs treated a rather overwhelming anxiety and not being comfortable in my own skin, being shy, being uncomfortable around other people, being worried all the time about things, just an angst and malaise that, fortunately, I no longer have” (1.2).

Others indicated difficulty trusting their own treating provider’s recommendations [eg, “I took antidepressants that I gave to patients, that I had samples of, just because I was depressed and I wanted to make sure that the doc was prescribing the right antidepressants for me” (2.4)].

Managing Stressful Situations

Many physicians reported misusing sedatives and/or opiates to relieve stress related to their work or personal life. As one described, “I had a couple of root canals and I was prescribed some hydrocodone for pain relief. I remembered it was one of the most wonderful feelings I had ever experienced. But it really did not take hold at that time. Later, when my life was unraveling in other areas, medical malpractice suit, and financial problems, I remembered how good that made me feel. And I needed help. I was going to help myself by taking this medication” (1.4). Typically, they described a transition from using the medication as prescribed, to misusing in order to handle the stressful situations [eg, “As I got into motherhood and tried to work part-time at the same time, I also got sick with sinusitis and got started with narcotics I was prescribed; the switchover from using it just for pain to pain and stress relief was subtle but really entrapping. I thought it was helping me” (1.2)]. Several physicians acknowledged this dual benefit—both symptom reduction and stress reduction. For example, one physician remarked, “I noticed two effects that were very positive. One was that the pain would go away and the second one was that I really didn’t care what my wife said. And then it became [pause] a painkiller, but not for physical pain, but more to put a cloud over what the situation was; I didn’t have to think of a divorce or whatever” (6.6). Still others reported misusing medication due to insomnia and related fatigue [eg, “[I would] start off taking Ambien at bedtime. If that didn’t work, I would add alcohol to it. If that didn’t work, I’d add a little Valium . . . Whatever I had.” (4.2)].

Recreational Use

A significant number of participants also reported misusing the prescription medication to get high. One physician noted, “There were drugs there to take, benzodiazepines for example, in combination with alcohol to boost the effect. I was aware, so I wouldn’t overdo it, but, an opportunity came around and I had them available or if somebody had them, I would definitely take one or two while I was drinking. And if I had some opiates, Percodan, Percocets, you know, I would take those, too” (7.3). Most who described such recreational use reported misusing prescription medications to enhance the effect of another substance [eg, “It was clear that if I took a little bit of Vicodin and a lot of alcohol, it was a great feeling. And it allowed me to drink less, so I could tell my wife, ‘Look honey, I didn’t have a whole bottle tonight. I only had three quarters. See, I’m cutting back!’” (2.11)]. On the contrary, several physicians reported using prescription medications to counteract the effects of other drugs. For example, as one described, “I started

with alcohol and did that for about five years, and then had a young lady introduce me to cocaine . . . And then I had to do Xanax to reverse that. And I did GHB [gamma-hydroxybutyric acid] in the same time period, for that same thing. And then, from there, I did a little bit of everything, including multiple different benzodiazepines and different opiates, pills” (2.10). These physicians noted that it seemed necessary to use the prescription drug to return to a more functional level [eg, “[I’d mix cocaine] with alcohol, with benzodiazepines . . . Once you’d go out there and start drinking . . . it sets up the craving for the coke. And, bang! You’re off to the races . . . [and then I took the benzos] to come down” (3.5)].

Avoiding Withdrawal

Others used the prescription drugs in an attempt to “detox” while preventing symptoms of withdrawal [eg, “My primary use was alcohol, and when [my alcohol use] was quite heavy and I was withdrawing, I would use the [Xanax] to mask those symptoms while I was at work” (9.1)]. Indeed, the issue of withdrawal seemed to become more salient to the physicians as their addiction progressed. Many noted that they initially misused the medications for one reason but then continued to misuse them purely to avoid experiencing withdrawal. For example, one physician reported, “In the early days, I would just use it after work, as an attempt to relax . . . to alleviate the anxiety and stress of work and pressure. And then as I became intolerant [*sic*] of the medication, I would find that if I didn’t take it, I would have symptoms of withdrawal, so I would need to take the medication on a regular basis just to feel normal. Just to maintain” (1.4). Some indicated that they justified the continued misuse of prescription drugs to allow them to function more effectively, particularly at work. For example, one physician reported, “There were periods of time when I was actually physically addicted to narcotics and benzodiazepines . . . I rationalized it that, if I didn’t take it at work, I wouldn’t be as proficient at what I was doing. And it’s true. I wouldn’t have been, because I would have been shaky and not able to focus. So I did take it at work, to make me normal. Not to really get the buzz or anything, just to prevent the withdrawal symptoms that would have come if I didn’t use at work” (2.2).

DISCUSSION

This study offers unique insight into reasons for prescription drug misuse among physicians referred for monitoring by a PHP because of substance-related impairment. The most common types of prescription drugs misused by study physicians (ie, primarily opiates and sedatives) were similar to those reported in previous studies on substance use among health care professionals (Stimson et al., 1984; Domino et al., 2005). These results are also consistent with reports of prescription drug misuse in the general population (SAMHSA, 2011). However, it is noteworthy that all of the physicians in this study who misused prescription drugs also endorsed lifetime use of alcohol (84.2%) and/or illicit drugs (71.1%).

Given concerns about the career-related stress experienced by many physicians (Mansky, 1999; Reimer et al., 2001), it was not surprising that the reasons physicians gave for misusing prescription medications were self-medication

for pain, emotional problems, and stress, in addition to recreational use and prevention of withdrawal. Indeed, these results were similar to those from a recent study assessing reasons for prescription drug misuse by other health care professionals, which found managing physical pain and preventing withdrawal symptoms to be the most important reasons for continued use (Merlo et al., 2013). In contrast, previous research assessing reasons for substance use among individuals with a psychiatric disorder suggested that using to get high was the primary factor (Laudet et al., 2004). A study of college students found that the primary reason for prescription stimulant misuse was academic performance enhancement; however, benzodiazepines were misused primarily to get high (Stone and Merlo, 2010). Furthermore, a study of non-health care professionals in treatment for prescription opioid use disorders reported getting high, curiosity, and pain management as their primary reasons for initial misuse of prescription opioids, and preventing withdrawal as the primary reason for recent use (Fulton et al., 2012). This provides additional evidence that health care professionals who misuse prescription drugs may represent a special subpopulation of substance users, who may use substances for various reasons and may require different methods of prevention and intervention to be most effective.

The data also confirm that some physicians use their privileged access to self-medicate with drugs, including those they had previously been prescribed by another provider for a legitimate medical reason. Thus, several steps could be taken to help mitigate prescription drug misuse by physicians. First, as many have suggested (Allan, 2011; O’Connor et al., 2011; Pinxten et al., 2011; Barron et al., 2012; Rasyidi et al., 2012), physicians tend to minimize their personal risk for the development of a substance use disorder, and therefore more attention should be paid to addiction education during medical school and graduate medical education. Specifically, information about the risks of prescription drug misuse, including self-prescribing for medical conditions, should be more strongly emphasized to prevent physicians from engaging in these practices. Furthermore, physicians should be more strongly encouraged to seek attention from an appropriate qualified health care provider if they are experiencing medical, psychiatric, or emotional concerns, rather than attempting to treat themselves. In addition, more information should be disseminated about PHPs so that physicians are aware of the resources available to assist them if they are distressed (DuPont et al., 2009). All physicians should learn the signs of substance abuse and the procedure for intervening with a colleague suspected of substance-related impairment (DesRoches et al., 2010). Finally, physicians who treat other physicians need to ensure that they monitor the use of any controlled medications prescribed. They should be aware of the increased risk for prescription drug misuse among physicians with a substance use history. Limiting access to potential drugs of abuse may be necessary for such physicians. Close observation and monitoring, including participation in a state PHP, may also be beneficial.

Some limitations of this study should be noted. First, the sample was relatively small and was wholly composed of physicians under monitoring contracts with the PHP in a single state. As a result, the findings might not be representative of all physicians who misuse prescription medications. Similarly,

although the sex distribution of the sample generally reflected the distribution of physicians participating in the state PHP, nearly all participants in this study were male. Thus, the generalizability of these results to female physicians with addiction, who tend to be younger and have more medical and psychiatric comorbidities than their male counterparts (Wunsch et al., 2007), remains unknown. Despite these limitations, there is inherent value in obtaining such in-depth data from physicians. The results provided details regarding specific reasons for prescription drug misuse, which would be very difficult to obtain from chart reviews or self-report surveys. The anonymity within the group discussion enabled participants to honestly share their comments with the researchers. In addition, by conducting 9 groups with 55 participants in total, we were able to demonstrate saturation in our results, suggesting a complete portrayal of the major themes.

CONCLUSIONS

To our knowledge, this is the first report of qualitative research examining reasons for prescription drug misuse among physicians under monitoring by a state PHP for substance-related impairment. Our results emphasize the importance of self-medication as a leading reason for misusing prescription medications, although recreational use was also an important factor. Prevention efforts targeting prescription drug misuse among physicians should be initiated during medical training, with continuing education requirements throughout the physicians' careers.

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